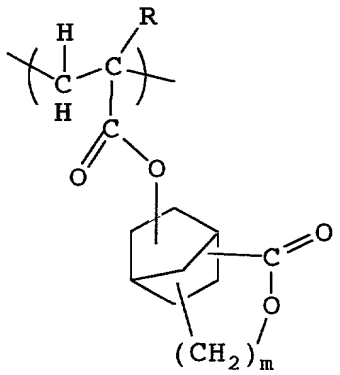
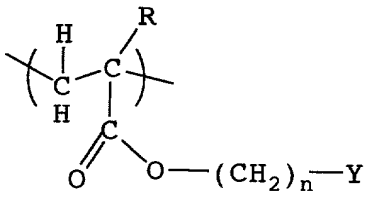
WHAT IS CLAIMED IS:

1. A chemical-amplification positive-working photoresist composition which comprises, as a uniform solution in an organic solvent:
(A) a resinous compound capable of being imparted with increased solubility in an aqueous alkaline solution by interacting with an acid;
(B) an acid-generating compound capable of generating an acid by irradiation with a radiation; and
(C) an organic solvent,
wherein the resinous compound as the component (A) is a copolymer consisting of the monomeric units to constitute the main chain structure thereof comprising (a1) acrylic or methacrylic acid ester units having a solubility-reducing group, (a2) monomeric units of an ester compound between acrylic or methacrylic acid and a lactone ring-containing bridged polycyclic saturated alcohol and (a3) monomeric units of an eater compound between acrylic or methacrylic acid and a straight-chain alcohol substituted by a hydroxyl group, alkoxy group or acyl group.

2. The chemical-amplification positive-working photoresist composition according to claim 1, wherein the resinous compound as the component (A) is a copolymer comprising (a1) acrylic or methacrylic acid ester units having a solubility-reducing group, (a2) monomeric units represented by the general formula:

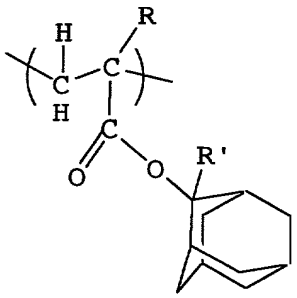


in which R is a hydrogen atom or a methyl group and m is 0 or 1, and (a3) monomeric units represented by the general formula:



in which R has the same meaning as defined above, Y is a hydroxyl group, an alkoxy group or an acyl group, and n is an integer of 2 to 18.

3. The chemical-amplification positive-working photoresist composition according to claim 2, wherein (a1) the acrylic or methacrylic acid ester unit having a solubility-reducing group in the resinous compound as the component (A) is a unit represented by the general formula:

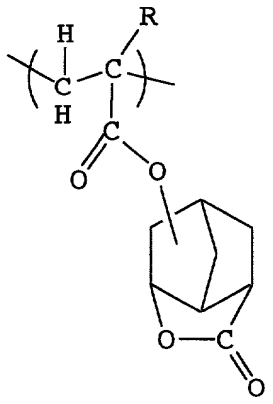


in which R is a hydrogen atom or a methyl group and R' is an alkyl group having 1 to 4 carbon atoms.

4. The chemical-amplification positive-working photoresist composition according to claim 1, wherein the resinous compound as the component (A) is a copolymer consisting of from 40 to 80% by moles of the monomeric units (a1), from 10 to 40% by moles of the monomeric units (a2) and from 5 to 20% by moles of the monomeric units (a3).

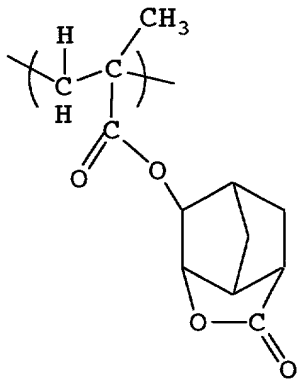
5. The chemical-amplification positive-working photoresist composition according to claim 2, wherein the monomeric unit

(a2) is a unit represented by the general formula:

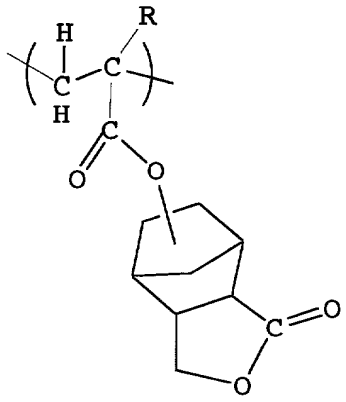


in which R is a hydrogen atom or a methyl group.

6. The chemical-amplification positive-working photoresist composition according to claim 5, wherein the monomeric unit (a2) is a unit expressed by the formula:



7. The chemical-amplification positive-working photoresist composition according to claim 2, wherein the monomeric unit (a2) in the resinous compound as the component (A) is a unit represented by the general formula:



in which R is a hydrogen atom or a methyl group.

8. The chemical-amplification positive-working photoresist composition according to claim 1, wherein the acid-generating compound as the component (B) is an onium salt compound of which the anionic counterpart is a fluorinated alkylsulfonic acid ion.

9. The chemical-amplification positive-working photoresist composition according to claim 1, which further comprises from 0.01 to 0.2 part by weight of a secondary aliphatic amine compound or a tertiary aliphatic amine compound per 100 parts by weight of the resinous compound as the component (A).

10. The chemical-amplification positive-working photoresist composition according to claim 1, wherein the organic solvent is a solvent mixture consisting of propyleneglycol monomethyl ether acetate, ethyl lactate or a combination thereof and γ-butyrolactone.